

## ABSTRACT

Two bacterial strains deficient in endogenous adenylate cyclase activity are provided. The strains, designated **BTH101** and **DHM1**, are useful in a signal amplification system comprising a bacterial multi-hybrid system, and more preferably a two-hybrid system, of at least two chimeric polypeptides containing a first chimeric polypeptide corresponding to a first fragment of an enzyme and a second chimeric polypeptide corresponding to a second fragment of an enzyme or a modulating substance capable of activating said enzyme as described in published PCT application WO 99/28746. The signal amplification system is useful in a method of selecting a molecule of interest, which is capable of binding to target ligand, wherein the interaction between the molecule of interest and the target ligand is detected with the signal amplification system, and the kit therefor, as described in WO 99/28746. The strains are also useful in the method of screening for a substance capable of stimulating or inhibiting the interaction between a target ligand and a molecule of interest, and the kit therefor, as described in WO 99/28746